

New DEQ System To Provide Better Water Monitoring

Louisiana has made some changes to the way it monitors the quality of Louisiana's water. In an effort to improve state coverage for water quality testing, DEQ has devised a new system of sampling that will allow enhanced monitoring to better protect Louisiana residents.

DEQ's Al Hindrichs is the Environmental Scientist Supervisor who assisted in creating and implementing the new system that began in June 1998. Hindrichs says that the new basin approach covers the state better than the old system did.

The new approach for Louisiana divides the state into 12 large-scale basins. Each basin contains an average of 40 subsegments consisting of watersheds such as rivers, lakes, estuaries and wetlands. Watersheds are areas where all the water falling on the ground and the man-made discharges to water drain into the same river, bayou, lake, wetland, or estuary. A watershed can be as small as the drainage area around one small stream or as large as the portion of the United States drained by the Mississippi River. DEQ samples particular water bodies within these watersheds (subsegments) because they are representative of water quality in an area.

The old system was designed primarily to monitor for water quality problems around cities and towns. The monitoring system gradually changed from looking for specific water quality problems to what is known as ambient sampling. Ambient sampling is a method of looking at large numbers of water bodies to gauge the overall water quality of an area. This allows DEQ to determine what areas are in good condition, as well as locating those areas experiencing water quality problems. The old system evolved specifically because it did not monitor every subsegment in Louisiana. Hindrichs says, "There were a lot of water bodies in there, but there was still somewhat limited monitoring. We had the field staff's opinions of what was going on out there, but we didn't always have sampling to back up those opinions."

The old system checked approximately 130 statewide sites each month, covering approximately 70 to 80 water bodies. The new system will eventually check all 476 subsegments that are in the state. All subsegments will have been monitored for at least one full year by the end of 2002.

The new design is currently arranged to sample all water bodies over a five year span. DEQ monitors two to three basins each year so that the Agency can put all its effort into a few areas at a time. Monitoring of all 12 basins every year is impossible because there are not enough resources to do it. This year's monitoring will be done on the Pontchartrain, Pearl and Mississippi basins. Along with these sites, DEQ continuously monitors 21 others throughout the state because of their high profile



Kerry St. Pe, director of the Barataria-Terrebonne National Estuary Program, takes a sample to determine if any contaminants are in the water.

or heavy use.

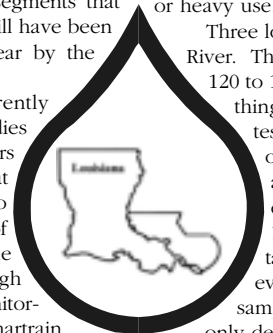
Three long-term sites are on the Mississippi River. These sites are tested every month for 120 to 130 parameters to see if there is anything unusual. Hindrichs says that the test results show little or no presence of the chemicals that people generally fear are polluting the river. For example, from 1991 until June of 1999, only 18 of 116 organic pollutants (ex. benzene, toluene) were ever detected in any ambient water sample. The presence of benzene was only detected 4 times out of 456 samples.

Each subsegment in the targeted basins, as well as the long term sites, are tested every month for 25 parameters. The samples are usu-

ally taken from a bridge site, boat, or pier.

The data is collected and stored in a database, which is then placed on the DEQ web site (www.deq.state.la.us) for public use. A water quality summary document known as the Louisiana Water Quality Inventory, 305(b) Report is published every two years. This report is also available on the DEQ Website. From this report, DEQ derives its actions to improve the environment. Improvements can include everything from enforcement to education and policy.

DEQ's new water sampling system allows for a more thorough sampling of the state's water bodies. It paves the way for a cleaner and safer Louisiana.



Visit the DEQ Website often at: <http://www.deq.state.la.us/>

